CERTIFIED FOR PARTIAL PUBLICATION¹

COURT OF APPEAL, FOURTH APPELLATE DISTRICT DIVISION ONE

STATE OF CALIFORNIA

THE PEOPLE,

D034429

Plaintiff and Respondent,

v.

(Super. Ct. No. SCD130926)

MANJIT KAUR BASUTA,

Defendant and Appellant.

APPEAL from a judgment of the Superior Court of San Diego County, William H. Kennedy, Judge. Reversed.

Cleary & Sevilla, Charles M. Sevilla and Eugene Iredale for Defendant and Appellant.

Bill Lockyer, Attorney General, David P. Druliner, Chief Assistant Attorney General, Gary W. Schons, Assistant Attorney General, Kyle Niki Shaffer and Alana Butler Cohen, Deputy Attorneys General, for Plaintiff and Respondent.

Raveen Obhrai for Fiona Mactaggart, House of Commons, a member of Parliament from the United Kingdom, Amicus Curiae on behalf of Defendant and Appellant.

Dixon & Truman and Lisa A. Rasmussen, Amici Curiae on behalf of Physicians and Bio-Scientists.

Defendant Manjit Kaur Basuta was convicted of assault on a child with force likely to produce great bodily injury resulting in death. (Pen. Code,² § 273ab.) Basuta was sentenced to a term of 25 years to life in prison. She appeals making numerous arguments, among them that section 273ab is unconstitutional, the trial court erred in the admission and exclusion of scientific evidence and expert testimony and in the failure to give various instructions.

FACTS

- A. Prosecution Case
- 1. The Death of Oliver S.

Thirteen-month-old Oliver S. died on March 18, 1998, in the San Diego Children's Hospital.

On March 17, 1998, Oliver's grandmother took him, an apparently healthy and normal child, to a home day care facility operated by appellant. Oliver had attended the

Pursuant to California Rules of Court, rule 976.1, this opinion is certified for publication with the exception of DISCUSSION parts C, E, F, G and J.

facility since February 9, 1998. At 12:23 p.m., appellant called 9-1-1 and requested assistance, stating that a baby had fallen, he was choking and not breathing. Police Officer Jeffrey Dunn arrived shortly and was met by appellant's housekeeper Ana Christina Carrillo. Carrillo led the officer to the rear yard where appellant was attempting to revive Oliver. The child was unconscious and not breathing. Believing Oliver was choking, the officer struck him six to eight times in the back hoping to dislodge any object in the child's airway.

When paramedics arrived, appellant told them Oliver fell going outside and struck his head on a carpeted area of the patio. By this time, Oliver had very slow respiration and was blue. The paramedics concluded he had sustained a severe head injury and transported him to Children's Hospital. On arrival, Oliver was unconscious and not breathing, his body temperature was low, his blood pressure high, he was nonresponsive to stimuli and his pupils were dilated. The emergency room physician concluded Oliver was suffering from high cranial pressure and severe brain damage. Oliver died the next morning.

An autopsy conducted by the medical examiner revealed no external injury except a recent bruise on the right side of the child's forehead. On internal examination the pathologist found a large subdural hematoma. A microscopic examination revealed an earlier subdural hematoma that the pathologist estimated was two to four weeks old. The doctor also found bleeding around Oliver's optic nerve and in the retina of each eye.

² All further statutory references are to the Penal Code unless otherwise specified.

The medical examiner concluded the most recent hematoma was not a "rebleed" from the earlier hematoma. Rebleeds bleed slowly and would not account for Oliver's sudden deterioration. The retinal hemorrhages found were not the result of either attempts at resuscitation or the earlier hematoma.

The medical examiner concluded the cause of death was a recent traumatic event involving shaking alone or with impact against a relative soft object. The injuries were inconsistent with Oliver falling or being pushed to the ground by another child.

Oliver's health history revealed that in June 1997, he fell out of his car seat approximately 30 inches to a carpeted floor. Oliver's mother contacted medical personnel who advised her that if he remained asymptomatic she should not be concerned. Oliver appeared to be uninjured.

Approximately three weeks before Oliver's death, his grandmother noticed he was having trouble with his balance. Over several weeks the dizziness subsided. Two weeks prior to his death, when his mother was giving him a bath, Oliver had a spasm or seizure. The child appeared to shiver for several seconds. He did not lose consciousness and his breathing was normal. Oliver ate and slept normally that evening. His mother and grandmother concluded he shivered because he was cold and did not take him to the doctor.

- 2. The Statements of Ana Christina Carrillo
- a. Trial Testimony

In January 1997 Carrillo, a native of Guatemala not legally residing in this country, started working for appellant as a housekeeper and an aid with the children. In

early March 1998, she quit but returned on March 17 to help for the day. After the children finished lunch that afternoon, appellant began to change their diapers. Appellant called Oliver to come for his diaper change. When he did not come, appellant repeatedly and angrily told him to do so. Finally, she walked to Oliver, picked him up with her hands under his arms and shook him. The child began to cry. Appellant carried Oliver to the diaper changing area shaking him as she went. As she finished with his diaper change, Oliver stopped crying. Appellant tried to stand him up, his eyes fluttered, he looked dizzy and was unable to stand. Oliver fell into appellant's arms and stopped breathing. Appellant attempted to resuscitate him.

At first appellant did not want Carrillo to call for help. Finally, she relented, telling Carrillo to state that Oliver had fallen. While the police and paramedics placed Oliver in the ambulance, appellant and Carrillo remained in the house. Appellant told Carrillo to tell the police that Jessica, one of the children, pushed Oliver and he fell.

b. Carrillo's Pre-Trial Statements and Activities

After Oliver was transported to the hospital, Carrillo told officers that Jessica pushed Oliver and he hit his head. Carrillo later stated she made the statement up because appellant threatened that immigration would put her in jail. Carrillo called her brother Pedro Carrillo from appellant's house. She told him that a girl had pushed a boy and the boy hit his head and was taken to the hospital. Appellant wanted Carrillo to spend the night at her house. Carrillo declined and left with her friend and roommate Araceli Arrendondo Aquino. Appellant told Carrillo to come back the next day.

As they drove home, Carrillo told Arrendondo that appellant shook Oliver.

Carrillo stated that appellant told her to tell the police he fell. Later in the evening

Carrillo called her brother and told him that appellant shook Oliver because she was

angry he would not come when she called. Carrillo told her brother she did not tell the

truth because appellant told her if she told the truth she would be deported.

The next day, Arrendondo took Carrillo back to appellant's house. Carrillo told appellant she was afraid. Appellant told her if she did not want to be involved, she should move far away. Arrendondo wanted Carrillo to leave but appellant insisted she stay since the police were returning and wanted to talk to Carrillo. When a police detective came to the house, Carrillo agreed to accompany him to the police station for questioning. However, while Carrillo used the telephone to call a friend to accompany her, appellant told the officer that Carrillo did not understand what the officer was asking her to do and that Carrillo did not want to go to the station. Appellant told the officer her attorney told her that Carrillo was not required to speak to the police. The detective departed.

Later in the day, appellant, her husband and Carrillo talked to appellant's attorney.

On the drive to his office, appellant repeatedly told Carrillo to say that Jessica pushed

Oliver. Fearful of being deported, Carrillo told the lawyer that Oliver had fallen. After

returning to appellant's home, they learned Oliver had died.

Carrillo went home. During the evening appellant called Carrillo and reminded her that Jessica had pushed Oliver. Appellant asked Carrillo to come that evening to appellant's sister-in-law's house since appellant's lawyer wanted to ask her additional

questions. Appellant also stated Carrillo should not stay at home since the police would be coming there to question her.

Carrillo and Arrendondo went to appellant's sister-in-law's house. Appellant wanted Carrillo to spend the night. Fearful, Carrillo wanted Arrendondo to stay as well; however, Arrendondo departed. Appellant went to her nearby home. Later, Arrendondo returned to the home of appellant's sister-in-law. Carrillo's other roommates, Irma and Norma, accompanied her. The women told Carrillo she should go home, that her brother wanted to talk to her. As they started to leave, appellant returned. An argument began between Carrillo's roommates and appellant and appellant's brother-in-law. Appellant told Carrillo her brother could see her there. Appellant grabbed one of Carrillo's arms, Irma the other. Carrillo was able to get away from appellant and she departed with her roommates.

On the drive back to their apartment, Carrillo told the women that appellant had shaken Oliver. Later that evening when Carrillo again told her brother what had occurred, he told her to see an attorney. The next day Carrillo talked to a lawyer. She explained that when appellant told Oliver to come and he did not do so, she picked him up and carried him to the diaper changing area. After appellant changed his diaper, Oliver could not stand up. Carrillo explained she told the police that Jessica pushed Oliver because she was afraid if she told the truth she might be deported. Carrillo did not tell the attorney that appellant had shaken the child. The lawyer advised Carrillo to speak to the police.

That evening Carrillo talked to the mother of one of the children she helped care for at appellant's day care center. Crying, Carrillo stated that Jessica did not push Oliver. She related that appellant was very upset when Oliver would not come and because of this, she shook him. After his diaper was changed, Oliver could not stand and stopped breathing. The following day Carrillo related this account of events to the police.

3. Shaken Baby Syndrome

The pediatric emergency room physician who treated Oliver believed his injury was consistent with having been shaken and inconsistent with a short fall. The medical examiner concluded the cause of Oliver's death was a nonaccidental trauma involving shaking and/or impact into a relatively soft object.

Dr. Randell Alexander, an associate professor of pediatrics and the director of the Center for Child Abuse at the Morehouse School of Medicine in Atlanta, Georgia, testified as an expert on Shaken Baby Syndrome (SBS). Dr. Alexander explained the syndrome results when a child is violently shaken and the brain is damaged either by direct injury to brain cells or secondarily by damage to the vascular system of the brain's coverings resulting in intercranial bleeding and pressure. The violent shaking can also result in retinal hemorrhages. The doctor explained the brain and eyes are not designed to handle the rapid accelerations and decelerations of violent back and forth shaking.

The doctor noted there are clinical indications of such injury, including swelling of the soft spot on the head, unconsciousness or semiresponsiveness, nausea and difficulty with motor functions. The child might have trouble breathing, be irritable, have trouble sleeping and be unwilling to eat.

Dr. Alexander stated studies indicated that short falls do not cause serious brain injuries. In a small percentage of short fall cases, a minor skull fracture can occur and cause no internal injury. Short falls do not cause subdural bleeding. Neither do short falls cause direct brain cell injury. Such falls do not result in retinal hemorrhages.

The doctor reviewed Oliver's medical records. He concluded Oliver's death was the result of complications of SBS. Dr. Alexander believed the earlier subdural hematoma was evidence that Oliver had been shaken before. He did not believe the earlier injury had any significant affect on the later fatal injury. Nor did he believe Oliver's death was the result of a rebleed of the earlier hematoma. Rebleeding can be caused by minor trauma but rebleeds rarely occur in children. Rebleeding results, however, in slow bleeding and seldom causes clinical signs. Any clinical signs would be slow in developing.

Dr. Alexander concluded that based on his behavior on the morning of March 17, 1998, Oliver was not suffering from a serious brain injury. The symptoms displayed in the early afternoon of that day, however, were evidence of a serious brain injury. Those symptoms were not the result of a rebleed of the earlier subdural hematoma.

The doctor stated it was not significant that Oliver had no injury of his ribcage or neck and no bruising on his chest or arms. The doctor noted such findings are relatively rare in SBS cases.

On cross-examination Dr. Alexander agreed that there were some doctors who believed that shaking alone could not result in a fatal injury to a child.

B. Defense Case

The defense sought to discredit Carrillo's claim that appellant violently shook Oliver. The defense noted the accusation contradicted her earlier statements, that the details of her accusation varied and that she had an interest in diverting suspicion from herself and in cooperating with the authorities.

The defense also offered evidence that shaking a baby, even violently, could not have caused Oliver's injuries, that his death resulted instead from accidental trauma causing a rebleed of his earlier hematoma. Dr. Janice Carter-Lourensz, a pediatrician specializing in child development and sexual abuse, questioned whether physicians were by training and experience qualified to discuss the forces, velocities, etc., involved and to draw valid conclusions concerning the cause of head injuries in children.

The doctor stated a controversy exists in medicine concerning the cause of the injuries described as "shaken baby syndrome." Some physicians believe the syndrome exists but only in particularly vulnerable children. They believe it is highly unlikely, given the biomechanics of the act, that a human being could exert sufficient force on a healthy child to cause a brain injury. The doctor stated that tests by biomechanical engineers and pathologist supported this conclusion.

Dr. Carter-Lourensz also stated that retinal bleeding is not a sign of child abuse since they are seen in children who have not been abused. The doctor stated many conditions could cause retinal bleeding, including prolonged cardiopulmonary resuscitation (CPR) and high intercranial pressure. She noted that Oliver was given CPR for 25 minutes and had high intercranial pressure.

The doctor also testified there was documentation of instances, and she was personally aware of cases, in which falls of four feet or less had resulted in fatal head injuries. She stated while this was a controversial matter among physicians, biomechianists were uniform in the conclusion that it could occur and had experimental results to prove it.

The doctor explained that children who have suffered serious brain injuries can have lucid intervals in which they appear normal. Dr. Carter-Lourensz testified that different children reacted to serious brain injuries in different ways.

Dr. John Plunkett, a forensic pathologist, reviewed Oliver's medical records, including the autopsy report. The doctor concluded there was no medical evidence that Oliver was shaken violently on March 17, 1998.

The doctor stated that a subdural hematoma cannot be caused in a healthy child with no previous hematoma as the result of shaking alone. He explained in great detail that based on cadaver and live primate studies and on studies attempting to model the violent shaking of babies (there have been no biomechanical studies dealing directly with the shaking of babies), the forces necessary to cause intercranial hemorrhaging cannot be produced merely by shaking a healthy child. Shaking as a cause of such injury was biomechanically impossible. The doctor stated that other persons in the medical and biomechanical community were of the same opinion. Dr. Plunkett had published an article expressing his views in the American Journal of Forensic Medicine and Pathology.

Dr. Plunkett further stated that impact injuries can cause subdural hemotomas in healthy children with no history of an earlier hematoma, but there was no indication

Oliver suffered a serious impact injury. A minor impact to Oliver's head could, however, have caused a rebleed of his healing hematoma. Dr. Plunkett estimated that Oliver's earlier hematoma was two to three weeks old but could be as old as several months.

Referring to government statistics and scientific publications dealing with playground accidents, Dr. Plunkett concluded that short falls could result in serious injuries and death. The doctor also indicated that lucid intervals of hours and even days can occur in children who have suffered serious brain injuries.

Dr. Plunkett testified that Oliver's hematoma was consistent with a rebleed from his earlier hematoma. The injury to Oliver that resulted in his death was consistent with him falling to the ground. The doctor stated the respiratory arrest that resulted in Oliver's death could have been the result of a seizure caused by the earlier hematoma. A rebleed might have been caused by minor trauma. Someone picking Oliver up and shaking him might have caused that trauma

C. Prosecution Rebuttal

Dr. Daniel Davis, a forensic pathologist, reviewed Oliver's medical records and concluded he died from a blunt force head injury as the result of being shaken. The doctor explained the mechanics of injuries caused to babies by being violently shaken. The doctor stated that retinal bleeding is not associated with CPR. Dr. Davis stated that the lack of injury to Oliver's neck did not contraindicate SBS since in the vast majority of cases such injuries are not seen. The doctor, citing studies, stated that Oliver's injuries were not consistent with a short fall. In the doctor's opinion the vast majority of forensic pathologists believe in the concept of SBS.

DISCUSSION

A. Exclusion of Evidence of Physical Abuse by Mother

Appellant argues the trial court erred when it excluded evidence that Oliver's mother was prone to anger and violence and had physically abused him.

1. Background

In its written motions in limine the prosecution asked the court to admit, pursuant to Evidence Code section 1101, subdivision (b), evidence of prior acts by appellant showing that in dealing with children she was easily frustrated and prone to abusive conduct. The prosecution asked the court not to admit evidence that during a custody dispute between Oliver's parents, the child's father accused Oliver's mother of being psychotic and of physically abusing the child. The prosecutor argued such evidence was not admissible to prove third party culpability.

At a pretrial hearing both issues were discussed at length. With regard to evidence of prior abuse by Oliver's mother, the prosecution first argued that while the fact of the earlier brain injury and hematoma was relevant, and which were undoubtedly the result of abuse, the identity of the abuser was irrelevant. This was so since whether some earlier brain injury made it more likely Oliver would be injured by shaking was not a defense to the charged offense. Further, the prosecutor argued that the claim Oliver's mother had abused him came from Oliver's father during a contentious custody dispute. The prosecutor stated much of the father's claim of abuse and injury to Oliver was based on alleged hearsay reports from medical personnel. Investigation of the declarants indicated the father's claims were untrue. In any case the father later recanted the accusations.

The defense responded that Oliver's father reported to the police and others seven months before Oliver's death that his wife, after giving birth, was very emotional. She would become so frustrated with Oliver that she jerked and shook him. Counsel stated that Oliver's father had not recanted his allegations but had become more vague in voicing them. Counsel noted this might be explained by the fact Oliver's mother and father were suing appellant and seeking substantial damages.

The defense noted its theory was that Oliver died from the rebleed of an earlier hematoma, which rebleed could have been caused by minor trauma. Appellant argued that if the prosecution was allowed to present evidence of an earlier hematoma, which most likely occurred after Oliver was in appellant's care, and if the prosecution offered evidence that Oliver had been healthy his entire life, the jury would inevitably be led to conclude it was appellant, and appellant alone, who was responsible for the earlier hematoma. The defense argued it should be allowed to show that his mother caused Oliver's earlier brain injury. Defense counsel stated it would accept a stipulation that appellant was not responsible for the earlier hematoma.

The trial court stated it did not want to hold multiple confusing and time consuming trials of claimed abuse by either appellant or Oliver's mother. It refused to allow the prosecution to present evidence concerning appellant's treatment of other children. The court also held that while the defense was entitled to show the fact of Oliver's earlier brain injury, it could not present evidence that the child's mother might have caused that injury. The court stated it was prepared to revisit the issue during trial.

At the time Oliver's mother testified, the defense filed memoranda, arguing it should be allowed to cross-examine her concerning the evidence of earlier injuries and the allegation that she had jerked or shaken Oliver. Appended to the memoranda were exhibits indicating the father's concern for Oliver's safety in light of the mother's emotional state, the general history of her violent actions and of her jerking or shaking the child. Other exhibits quoted the father concerning hearsay statements made to him about injuries to Oliver.

The defense argued that as the prosecution case was developing, it believed the People would argue or at least the jury would conclude that it was appellant who caused Oliver's earlier hematoma. The pattern of reasoning would be that if Carrillo stated appellant shook Oliver on March 17, it was reasonable to believe appellant shook the child on an earlier date causing the first hematoma. Defense counsel stated the issue was not one of third party culpability but simply whether appellant would be allowed a meaningful cross-examination of Oliver's mother.

The trial court denied the defense request to cross-examine Oliver's mother concerning her prior conduct toward Oliver. The court reiterated that the fact of an earlier injury was relevant but who caused the injury was of questionable relevance. The court concluded the evidence was of questionable value because it came from an exhusband during a divorce proceeding and it had since been recanted. It believed the matter was collateral, confusing and time consuming.

During argument, the prosecutor told the jury there was no evidence that Oliver had been beaten the night before he collapsed at appellant's day care center. The

prosecutor told the jury: "A parent has an absolute duty not to hurt or injure their child. But when you go to work to maintain a living so that child can eat, then you have to ask somebody else to do it, so you have to delegate that duty." During argument the prosecutor repeatedly referred to Oliver as a healthy and happy child who never had anything wrong with him except the usual ills of childhood. The prosecutor noted Oliver's earlier day care workers testified the child "never had a scratch on him." In talking about the medical concept of a lucid interval, i.e., an asymptomatic period following a brain injury, the prosecutor noted that defense counsel asked if a lucid interval could account for the lack of symptoms following an injury the night before Oliver collapsed. The prosecutor noted the defense pathologist stated it could. The prosecutor then rhetorically asked: "What happened to him the night before?"

2. Discussion

Appellant argues she was denied the right to present relevant evidence corroborative of her theory of defense when the trial court excluded, based on Evidence Code section 352, testimony that Oliver's mother had a history of abusive behavior directed at her former husband, other persons and Oliver. We agree.

a. Law

All relevant evidence is admissible unless specifically excluded by statute or by the federal or California Constitution. (Evid. Code, § 351.) Evidence Code section 210 states that "relevant evidence" is evidence "having any tendency in reason to prove or disprove any disputed fact that is of consequence to the determination of the action."

(*People v. Scheid* (1997) 16 Cal.4th 1, 13.) Relevant evidence may be excluded pursuant

to Evidence Code section 352 if the trial court in its discretion concludes "its probative value is substantially outweighed by the probability that its admission will (a) necessitate undue consumption of time or (b) create substantial danger of undue prejudice, of confusing the issues, or of misleading the jury." (*People v. Minifie* (1996) 13 Cal.4th 1055, 1069-1070.) A trial court's decision to exclude evidence pursuant to section 352 will not be overturned absent an abuse of that discretion. (*Id.* at p. 1070.)

A defendant may present evidence that another person committed the charged offense. "[T]o be admissible, evidence of the culpability of a third party offered by a defendant to demonstrate that a reasonable doubt exists concerning his or her guilt, must link the third person either directly or circumstantially to the actual perpetration of the crime. In assessing an offer of proof relating to such evidence, the court must decide whether the evidence could raise a reasonable doubt as to defendant's guilt and whether it is substantially more prejudicial than probative under Evidence Code section 352."

(People v. Branford (1997) 15 Cal.4th 1229, 1325.) The evidence must do more than merely show a motive or opportunity to commit the crime. (People v. Hall (1986) 41 Cal.3d 826, 833.)

b. Analysis

We conclude the trial court erred in excluding evidence that Oliver's mother, when angry or frustrated, had jerked and shaken the child.

The medical evidence in this case was conflicting and, given evidence of an earlier brain injury, allowed for multiple possible causes of Oliver's death. Certainly the evidence allowed the jury to conclude that Oliver died as a result of violent shaking by

appellant on March 17. It also allowed, however, for the possibility that the child died from a rebleed of his earlier subdural hematoma which rebleed resulted from a minor trauma unoccasioned by a violent assault.

If the jury believed Carrillo's account that on March 17 appellant violently shook the child and such act resulted in Oliver's death, it could properly convict appellant of a violation of section 273ab. This is so even if Oliver's death would not have occurred but for his earlier injury. (See *People v. Wattier* (1996) 51 Cal.App.4th 948, 953; *People v. Stamp* (1969) 2 Cal.App.3d 203, 211.) The difficulty is that the jury had to believe Carrillo. Whatever the jury concluded about the medical evidence, if Carrillo was not believed, the prosecution had no case against appellant. The defense impeached Carrillo in a variety of ways. It noted she at first did not report a shaking, her later accounts of the incident were inconsistent and she had an interest in deflecting suspicion from herself and cooperating with the authorities.

Without the evidence that Oliver's mother might have been the cause of the original hematoma, the jurors were left with a false impression that reasonably could have affected their evaluation of Carrillo's credibility and ultimately their assessment of appellant's core defense. The evidence strongly suggested that Oliver's first injury, which prosecution evidence attributed to shaking, occurred soon after he began attending appellant's day care center. That conclusion was supported by medical testimony concerning the age of the original hematoma and the timing of Oliver's dizziness and seizure. The evidence at trial and the prosecution's argument suggested Oliver's home life was happy, safe and unremarkable. If Oliver's first injury did not occur at home, then

it most likely occurred at day care, a conclusion supported by the fact that appellant's home life was, as portrayed by the prosecution, safe, happy and nonthreatening.

The fact that Oliver's earlier shake-induced injury likely occurred while he was in appellant's care tended to corroborate Carrillo's testimony that appellant violently shook him on March 17. That testimony reciprocally tended to support the conclusion that it was appellant who caused Oliver's first injury.

Appellant was allowed to present her case that Oliver died from a rebleed from his earlier hematoma. In light of the evidence presented, she should also have been allowed to present evidence that it was Oliver's mother, and not her, who was the cause of that first injury. While the trial court was not required to allow the defense to present every piece of evidence suggesting that Oliver's mother was emotional or angered easily, it was an abuse of discretion to exclude evidence that she had physically abused Oliver. Such evidence showed more than a mere motive or opportunity. At least one defense theory was that Oliver's mother injured him, causing a subdural hematoma and the child died when the hematoma rebled as the result of minor trauma on March 17. Appellant should have been able to present evidence about and argue that Oliver's mother had abused him.

Since we find additional error, we reserve discussion of prejudice.

B. Mention of Polygraph Examination

Appellant argues her conviction should be reversed because a police officer revealed to the jury that Carrillo had taken a polygraph test. Appellant further asserts the trial court erred in refusing to allow testimony that Carrillo failed the test.

1. Background

The prosecution in its trial brief noted Carrillo took and passed a lie detector test. During the hearing on in limine motions, the trial court expressed concern that the prosecution might directly or indirectly reveal that fact. The prosecutor stated he did not intend to do so. He stated there would be evidence of an incident involving Carrillo and Detective McDonald in which the possibility that Carrillo would take a polygraph test was discussed. The prosecutor asked the trial court to order that he tell Carrillo and McDonald not to mention the word polygraph.

Defense counsel noted that, contrary to the prosecutor's representation, the polygraph test was inconclusive and tended to show falsity. Counsel noted that Evidence Code section 351.1 not only excludes evidence of polygraph results but any reference to polygraph examinations. The court ordered the prosecutor to insure there be no mention of the examination by his witnesses.

The last witness in the prosecution's case was Police Detective Maria Rivera.

Rivera participated in an interview at the police station in which Carrillo accused appellant of shaking Oliver. The detective authenticated a videotape of that interview.

After the tape was played for the jury, the detective testified about how the interview was conducted. The prosecutor then asked: "After Christina Carrillo finished the interview, what happened?" The detective responded: "She agreed to take a polygraph."

Defense counsel objected. At the close of the witness's testimony, counsel asked for a mistrial, noting the court's order that no mention be made of the polygraph examination and the violation of that order during the detective's testimony. The

prosecutor stated he was shocked by the answer to his question. He stated he did not warn Rivera about avoiding mention of the polygraph examination believing a police detective would know not to do so. The prosecutor argued the reference to the examination was brief, did not reveal the result and did not require the court grant a mistrial.

The trial court noted the law considers polygraph examinations unreliable and, absent a stipulation, excludes any reference to them. The court concluded, however, that since no mention of the results, which were in dispute, was made, the reference to the examination was meaningless and nonprejudical. The court denied the motion for mistrial and concluded it best not to give a curative admonition at that time.

The defense requested, in light of the mention of the polygraph examination, that its own polygraph expert be allowed to testify that Carrillo's test was inconclusive but tended to indicate falsity. Counsel noted the jury now knew Carrillo was given a polygraph examination by the police and could only conclude she passed it. The court noted the prosecution expert had a different opinion concerning the results of the test and would not allow testimony on the matter.

During the instruction conference, defense counsel renewed the motion for mistrial. In the alternative, counsel asked to present evidence concerning Carrillo's examination results. The trial court denied the motion for mistrial and stated it would not permit evidence concerning Carrillo's performance on the polygraph examination. The prosecutor stated if the defense insisted on it, he had no objection to a curative

admonition. The court considered the matter and decided not to resurrect the issue by telling the jury to disregard the mention of Carrillo's polygraph examination.

2. Discussion

There is no dispute that inadmissible evidence was presented to the jury. Evidence Code section 351.1, subdivision (a), states in part "the results of a polygraph examination, the opinion of a polygraph examiner, or any reference to an offer to take, failure to take, or taking of a polygraph examination, shall not be admitted into evidence in any criminal proceeding." This firm and broad exclusion is justified by the unreliable nature of polygraph results, by the concern that jurors will attach unjustified significance to the fact of or the outcome of such examination and because the introduction of polygraph evidence can negatively affect the jury's appreciation of its exclusive power to judge credibility. (See *In re Aontae D.* (1994) 25 Cal.App.4th 167, 176-177; *People v. Kegler* (1987) 197 Cal.App.3d 72, 86-89.)

Since the error is conceded, the issue is its significance. We conclude the error was serious. Carrillo's credibility was crucial to the prosecution's case. While it was possible for the prosecution to have partially lost the battle of experts and still convict appellant of a violation of section 273ab, the prosecution's case could not tolerate a loss of the conflict over Carrillo's credibility. Rivera's comment had a high potential to affect the jury's resolution of that issue.

The People argue, as the trial court concluded, that Detective Rivera's mention of Carrillo taking a polygraph examination was essentially a technical error since no statement was made about its result. We disagree. The mention of Carrillo taking a

polygraph test came at the worst possible time. The prosecution's case had reached a crescendo when Rivera introduced the videotape recording of Carrillo's vivid statement to the police. Asked what happened after the statement, Rivera replied Carrillo agreed to take a polygraph examination. First, a juror might conclude that Carrillo's apparent readiness to take a polygraph examination reflected her confidence in its result. A juror could also reasonably conclude the State would not base a serious prosecution on the testimony of a lone witness whose credibility it had cause to doubt. A serious danger exists that one or more jurors concluded that Carrillo passed the polygraph examination and that she was, therefore, worthy of belief.

So finding, we conclude nonetheless that the trial court acted properly in refusing the defense request to admit evidence that Carrillo's test results were at best inconclusive. Such admission would violate Evidence Code section 351.1. More importantly, while admitting such evidence might have improved the defense's tactical position, it would have merely further and improperly confused the issue of Carrillo's credibility.

We conclude the improper mention of the polygraph test, in combination with the error in excluding evidence that Oliver's mother had jerked or shaken the child, was prejudicial. Both errors substantially affected the crucial issue in the case -- Carrillo's credibility. We conclude it is reasonably probable that but for these errors a result more favorable to the defendant would have been reached and we reverse the judgment. (See *People v. Watson* (1956) 46 Cal.2d 818, 836.)

We address additional issues relevant to a retrial of this matter.

C. Scientific Evidence, Expert Opinion and Experiments

Appellant makes several arguments related to the admission or exclusion of evidence concerning SBS. Appellant concedes that based on current law the testimony of a qualified expert concluding that a death resulted from SBS is a medical opinion that need not meet the foundational requirements for the admission of scientific evidence described in *People v. Kelly* (1976) 17 Cal.3d 24 (*Kelly*). However, she argues such a rule denies her due process; such evidence should be required to satisfy *Kelly*, and a review of the record demonstrates that it does not. Appellant also argues the trial court denied her due process when it excluded the testimony of biomechanist Dr. Michael Jones that shaking could not have caused Oliver's injuries but that a short fall could.

1. Background

a. Context

The prosecution and defense experts differed concerning whether the shaking of a healthy baby could result in the injuries suffered by Oliver and whether a short fall could cause intercranial damage. The prosecution's pediatricians and forensic pathologists concluded shaking, but not by a short fall, could cause Oliver's injuries. Their reasoning and the reasoning of the materials on which they relied was, in large part, inductive, or epidemiological, i.e., clinical experience and the study of actual cases demonstrate that shaking causes serious brain injuries and that short falls do not.

The defense pediatrician and forensic pathologist, while also reasoning inductively, relied to a greater extent on biomechanical testing to conclude that the shaking of healthy babies cannot result in brain injuries and that short falls can. The

defense experts believed that many physicians lack sufficient knowledge and appreciation of biomechanical forces and therefore their conclusion concerning the causes of brain injuries in babies are erroneous.

Defense pathologist Dr. Plunkett stated that shaking a baby could not develop the forces necessary to cause a subdural hematoma in a healthy child. The doctor based this conclusion on, and discussed in detail, various biomechanical studies done over many years for the automobile industry and specific studies of SBS conducted by a group of neurosurgeons and biomechanical engineers. Based on biomechanical research and government statistics, the doctor believed that short falls could cause serious brain injuries. Defense pediatrician Dr. Carter-Lourensz concurred, citing the same literature and her own experience.

b. Dr. Michael Jones

It was the intention of the defense to call biomechanist Dr. Michael Jones to testify concerning SBS and short fall brain injuries. Dr. Jones has a doctorate in bioengineering. At the time of trial he was a lecturer in clinical, trauma and orthopedic engineering at the University of Wales, Cardiff. His particular area of specialization is the application of engineering principles to forensic medicine.

At an Evidence Code section 402 hearing, Jones stated that based on generally accepted biomechanical research, it was his opinion that shaking alone could not generate sufficient forces to cause a subdural hematoma in a child but that it was possible for a child to sustain a subdural hematoma as the result of a short fall to a hard surface.

Dr. Jones testified he was asked to determine experimentally if shaking a 34.25-pound, 29.5-inch-tall infant, i.e., Oliver's weight and height, could generate sufficient force to cause a subdural hematoma. He noted there are generally accepted values for the force required to cause such an injury. No other evidence or testimony was offered to corroborate the conclusion that such accepted value existed. Dr. Jones stated he designed his experiment to replicate an earlier published study but used a test figure matching the weight and height specifications provided by counsel and the duration of shaking reported by Carrillo. It was this earlier published study on which defense pathologist Plunkett based his opinion that shaking could not cause a subdural hematoma.

Dr. Jones also designed an experiment to determine the "g forces" generated by a 34-pound infant falling 29.5 inches to a concrete surface covered by a thin mat. In doing so he used a head form and experimental method he stated was accepted in the United States, Britain and Germany for determining the impact characteristics of commonly encountered surfaces and the injuries that can result from such impacts. No evidence except Dr. Jones's testimony was offered to support this assertion.

The defense argued that the methodology utilized by Dr. Jones was generally accepted in the field of biomechanics. The prosecutor responded that Dr. Jones relied on theoretical models that did not replicate the specifics of Oliver's head and neck. He argued in addition that the experimental models used by Dr. Jones had never been accepted in a court and the test simply did not comply with the requirements of the *Kelly* test.

The trial court stated it could find no California case allowing evidence based on experiments like that conducted by Dr. Jones. The trial court, apparently based on the *Kelly* rule, excluded the evidence, concluding the experiment "too theoretical to comply with generally accepted standards of scientific reliability." The court stated it was one thing to use mannequins and models for medical studies but another to use such studies to influence a jury.

The defense asked the court if Dr. Jones would be allowed, based on his general expertise rather than his experiment, to testify that shaking cannot cause a subdural hematoma while a short fall can cause such an injury. The prosecutor objected, noting that Jones was not a physician. The prosecutor stated it was apparently the defense position that anyone could testify concerning the cause of subdural hematomas after reading the literature in the field.

The trial court without comment sustained the prosecution's objection.

- 2. Law
- a. Scientific Evidence, Expert Opinion

The law of this state treats the admission of "scientific evidence" and "scientific expert opinion" differently. While in any given case the difference between one and the other can be difficult to discern, the theory supporting such separate treatment and the general test to apply can be clearly stated.

The *Kelly* rule states that evidence based upon application of a new scientific technique may be admitted only after the reliability of the technique has been established. Sufficient reliability is shown when the technique has gained general acceptance in the

scientific field to which it belongs. General acceptance means a consensus drawn from a typical cross-section of the relevant qualified scientific community. Such general acceptance can be demonstrated by qualified expert testimony and by reference to relevant professional literature. The required consensus does not exist when scientists significant either in number or expertise publicly oppose a technique as unreliable. (*People v. Soto* (1999) 21 Cal.4th 512, 519.)

In *People v. Stoll* (1989) 49 Cal.3d 1136, 1156, the court noted that this conservative approach has two themes. The first is that the *Kelly* rule "applies to that limited class of expert testimony which is based, in whole or part, on a technique, process, or theory which is *new* to science and, even more so, the law." The second theme is that the rule is applied to the unproven techniques or procedures that "appear in both name and description to provide some definitive truth which the expert need only accurately recognize and relay to the jury." (*Ibid.*) The court gave the example of machines or procedures that analyze physical data. Jurors might easily accept such evidence as objective and infallible. (*Ibid.*)

The court in *Stoll* contrasted such evidence with general expert opinion testimony, stating "absent some special feature which effectively blindsides the jury, expert opinion testimony is not subject to [*Kelly*]." (*People v. Stoll, supra*, 49 Cal.3d at p. 1157.) The court noted that when a witness gives a personal opinion, the jurors will not accept it as infallible since it is understood that human beings make mistakes. (*Ibid.*)

In particularizing the distinction between "scientific evidence" and "scientific expert opinion," the *Stoll* court noted that it had never "applied the [*Kelly*] rule to expert

medical testimony." (*People v. Stoll, supra*, 49 Cal.3d at p. 1157; see also *People v. Rowland* (1992) 4 Cal.4th 238, 266.) In *People v. Mendibles* (1988) 199 Cal.App.3d 1277, 1292-1293, the court stated "there is a distinct difference between the development of a new scientific technique, i.e., 'a novel method of proof' [citation], and the development of a body of medical knowledge and expertise." The court stated that the expression of a medical opinion as to the cause of a wound or injury falls outside the realm of the *Kelly* rule. It noted that an expert medical witness is qualified "'to give an opinion of the cause of particular injury on the basis of the expert's deduction from the appearance of the injury itself.' [Citation.]" (*Id.* at p. 1293.) *Mendibles* stated "a medical diagnosis based on medical literature will not be viewed as a new scientific technique, but simply the development of an opinion from studies of certain types of cases.

[Citation.]" (*Id.* at pp. 1293-1294.)³

Mendibles states: "Characteristic of those instances in which diagnosis is considered to be no more than the expression of expert medical opinion are a determination death resulted from strangulation (People v. Memro (1985) 38 Cal.3d 658, 692), a conclusion rectal abrasions indicate anal intercourse without the use of a lubricant (People v. Stanley (1984) 36 Cal.3d 253, 256), the determination death was caused by a blunt instrument similar to or consistent with a baseball bat (People v. Wiley (1976) 18 Cal.3d 162, 166), the analysis of whether a wound was self- inflicted (People v. Cole (1956) 47 Cal.2d 99, 103-105), a conclusion death was caused by a 'heavy instrument such as a bolo machete' (People v. Corona (1978) 80 Cal.App.3d 684, 693-694), the use of battered child syndrome to determine a child's injuries were not suffered accidentally (People v. Jackson, supra, 18 Cal.App.3d 504), and the determination certain bruises were not caused by a fall (People v. Cooley (1962) 211 Cal.App.2d 173, 199)." (People v. Mendibles, supra, 199 Cal.App.3d at p. 1294.)

In general, "'A person is qualified to testify as an expert if he has special knowledge, skill, experience, training, or education sufficient to qualify him as an expert on the subject to which his testimony relates.' [Citation.] An expert witness's testimony in the form of an opinion is limited to a subject 'that is sufficiently beyond common experience that the opinion of an expert would assist the trier of fact' [Citation.] A claim that expert opinion evidence improperly has been admitted is reviewed on appeal for abuse of discretion. [Citation.]" (*People v. Catlin* (2001) 26 Cal.4th 81, 131; mod. Sept. 26, 2001, 26 Cal.4th 1060c.)

b. Experiments

"The proponent of experimental evidence bears the burden of production and proof on the question whether such evidence rests on an adequate foundation." (*People v. Bonin* (1989) 47 Cal.3d 808, 847.) To be admissible evidence based on an experiment must be relevant, the experiment must be conducted under circumstances at least substantially similar, though not identical, to those of the occurrence in question, the qualifications of the experimenter must be demonstrated with particularity, the evidence must not be unduly time consuming and not confuse or mislead the jury. (*People v. Bradford, supra,* 15 Cal.4th at p. 1326; People v. *Turner* (1994) 8 Cal.4th 137, 198.)

When an experiment relies on a new scientific technique, the proponent of the evidence must satisfy the requirements defined in *Kelly* for the admission of novel technical evidence. (*People v. Roehler* (1985) 167 Cal.App.3d 353, 387-388; *People v. Dellinger* (1984) 163 Cal.App.3d 284, 292-293.)

The trial court has a wide discretion to admit or exclude experimental evidence. (*People v. Boyds* (1990) 222 Cal.App.3d 541, 565-566; *People v. Roehler, supra*, 167 Cal.App.3d at p. 386.) However, the *Kelly* determination is a mixed question of law and fact and subject to de novo review. (*People v. Morganti* (1996) 43 Cal.App.4th 643, 663; *People v. Reilly* (1987) 196 Cal.App.3d 1127, 1134.)

- 2. Discussion
- a. Prosecution Evidence Concerning Cause of Death

Appellant concedes that under current California law the opinion of a qualified expert concerning a cause of death is not subject to the *Kelly* test. Appellant, calling such rule an "odd dichotomy," instead takes issue with the rule, arguing there is no reasonable basis for treating expert "scientific opinion testimony" and "scientific evidence" differently. Appellant considers it particularly odd that prosecution experts in concluding SBS a valid diagnosis relied on "anecdotal experience" while Dr. Jones's opinion, based on "scientific studies and a supporting replicating experiment," that it is not a valid diagnosis was excluded. Appellant argues a rule so arbitrary as to render such a result denied her due process. She asserts that the *Kelly* test should be applied to expert medical opinions concerning causes of death. Noting defense testimony that SBS is not accepted by all experts as a valid diagnosis, she argues the theory lacks general acceptance and the prosecution's experts should not have been allowed to state their opinion that Oliver died as the result of being violently shaken.

First, there is nothing arbitrary about treating expert opinion testimony and scientific evidence differently. Our Supreme Court has concluded that the dangers

inherent in the admission of the results of seemingly infallible tests justify a conservative approach to their use at trial. On the other hand, since personal opinion testimony is less likely to be blindly accepted by the jury, is more readily addressed by cross-examination and contradictory evidence, it is better to admit that evidence and let it play out before the trier of fact. While one might disagree with this division, and while it might be difficult in some cases to apply, it is neither unreasonable nor arbitrary.

Next, there is nothing unscientific about the use of an "anecdotal" method to reach conclusions. The proper use of case studies is a central feature of medical research in general and of epidemiology in particular. (*Stedman's Medical Dictionary* (26th ed. 1995) p. 582.)⁴ Neither is there any magic in experimentation. An experiment is only as good as its design and its execution.

The prosecution evidence concerning the cause of Oliver's death was not subject to a *Kelly* analysis and was properly admitted.⁵

[&]quot;[E]pidemiology. The study of the distribution and determinates of health-related events in specified populations, and the application of the study to control of health problems. . . . [¶] The study of the distribution and determinants of health-related states in human and other animal populations. Epidemiological studies involve surveillance, observation, hypothesis-testing, and experiments. Distribution is established by analyzing the time, place, and class of persons affected by a disease. Determination may include physical, biological, social, cultural and behavioral factors. Epidemiological methods are most commonly applied to study the disease; however, they also may be used to examine causes of death (e.g., homicides of various sorts) or behaviors, (e.g., tobacco or alcohol use, practice of safe sex, use of health services.) Epidemiology plays key role in formulation and implementation of public health policy."

Appellant has filed a motion asking we "consider," in the event the matter is not reversed, a California Rules of Court, rule 23, reference hearing concerning the trustworthiness of SBS evidence. The motion is denied.

b. Dr. Jones

Appellant contends the trial court erred when it excluded Dr. Jones's opinion testimony that SBS does not exist and that a short fall can result in serious brain injury. She argues the court also erred in excluding the results of the experiments by Dr. Jones involving the shaking of an anthropomorphic dummy the same height and weight of Oliver and involving short falls using a head form. We conclude the court abused its discretion in excluding Jones's opinion but did not abuse its discretion in excluding the results of his experiment.

1. Opinion

A key element in the defense expert's conclusion that SBS does not exist is a body of literature based on the conduct of experiments in the field of biomechanics. Dr. Jones was a qualified biomechanical engineer with particular knowledge about SBS.

"Qualifications other than a license to practice medicine may serve to qualify a witness to give a medical opinion. (*People v. Villareal* (1985) 173 Cal.App.3d 1136, 1142

['Because of the dramatic growth of diverse interdisciplinary studies in recent times, often individuals of different nonphysician professions are called upon to give medical opinions or at least opinions involving some medical expertise']; see *People v. Fierro* (1991) 1 Cal.4th 173, 224; *Brown v. Colm* (1974) 11 Cal.3d 639, 645 [referring to an 'unmistakable general trend in recent years . . . toward liberalizing the rules relating to the testimonial qualifications of medical experts'].)" (*People v. Catlin, supra,* 26 Cal.4th at pp. 131-132.)

It is often the case in forensic pathology that an understanding of a cause of death requires an interdisciplinary approach, e.g., medicine and ballistics or physics. The trial court stated no reason for excluding Dr. Jones's relevant and qualified testimony and we can think of no valid basis for doing so. The trial court abused its discretion in excluding Dr. Jones's opinion testimony.

2. Experiment

We conclude the trial court did not abuse its discretion in excluding the results of Dr. Jones's experiments. The court could reasonably conclude that the defense failed to lay a proper foundation for the admission of that testimony. The results of scientific experiments have the same potential to be taken by jurors as conveying infallible truths as does scientific testimony. In this case Dr. Jones and defense counsel repeatedly declared that both the baby shaking and short fall experiments involved generally accepted apparatus and procedures. No additional evidence, however, supported those conclusory statements. In light of the failure to present such foundational evidence, the court could properly exclude the results of the experiments. (See *People v. Dellinger, supra*, 163 Cal.App.3d at p. 293; compare *People v. Roehler, supra*, 167 Cal.App.3d at pp. 389-390.)6

We are not indifferent to the controversy concerning the existence of SBS evidenced by the testimony in this case. There are 350 criminal and civil state appellate

We have granted permission to a group of 11 physicians and 1 mechanical engineer to file an amicus curiae brief in support of appellant. While recognizing that medical opinion testimony is not subject to the *Kelly* rule, these experts argue that the concept of SBS is based on a series of false conclusions concerning the causes and symptoms of specific trauma in children.

D. Instruction on Lesser Included Offense

Appellant was charged with a violation of section 273ab, assault on a child with force likely to produce great bodily injury resulting in death. She contends that assault by means of force likely to produce great bodily injury (§ 245, subd. (a)(1)) is a lesser included offense of the charge crime and the trial court erred in denying her request to so instruct the jury.

1. Background

Appellant requested the trial court to instruct concerning what she argued were the lesser included offenses of simple assault and assault by means of force likely to produce great bodily injury (§ 245, subd. (a)(1)). As to the section 245, subdivision (a)(1), lesser included offense, appellant argued that both sections 273ab and 245, subdivision (a)(1), require an assault by means of force likely to cause great bodily injury. Section 273ab, however, has the additional element that the assault result in death. Appellant argued that given the medical evidence, the jury could conclude that while she assaulted Oliver with the required force, the assault did not cause the child's death. If the jury so found, they could find appellant guilty of section 245, subdivision (a)(1). The trial court concluded the elements of sections 273ab and 245, subdivision (a)(1), were different and appellant,

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court cases from 1983 to the present that deal in one way or other with SBS. The vast majority without discussion treat SBS as a valid concept. Only a few address the admissibility of SBS diagnoses. None of those cases reject such evidence. (See *State v. Cort* (2000 N.H.) 766 A.2d 260, 265; *State v. Compton* (N.J. Super. A.D. 1997) 701 A.2d 468, 474-474; *In Re Renae Ebony W.* (1994) 452 S.E.2d 737, 741; *State v. Lopez* (1991 S.C.) 412 S.E.2d 390, 393; *State v. McClary* (1988 Conn.) 541 A.2d 96, 101-102; *Matter of Lou R.* (1986) 499 N.Y.S.2d (Fam.Ct. 1986) 846, 848-850.)

while entitled to an instruction on simple assault, was not entitled to a lesser included offense instruction on section 245, subdivision (a)(1).

2. Discussion

A trial court must instruct concerning all lesser included offenses which find substantial support in the evidence. (*People . v. Barton* (1995) 12 Cal.4th 186, 195.) An offense is necessarily included in a greater offense when, for present purposes, under the statutory definition of the offenses the greater offense cannot be committed without necessarily committing the lesser. (*People v. Hagen* (1998) 19 Cal.4th 652, 667; *People v. Joiner* (2000) 84 Cal.App.4th 946, 971-972.) To warrant such an instruction, there must be substantial evidence of the lesser included offense, that is, "evidence from which a rational trier of fact could find beyond a reasonable doubt" that the defendant committed the lesser offense. (*People v. Berryman* (1993) 6 Cal.4th 1048, 1081.)

Speculation is insufficient to require the giving of an instruction on a lesser included offense and a lesser included instruction need not be given when there is no evidence that the offense is less than that charged. (*People v. Mendoza* (2000) 24 Cal.4th 130, 174.)

The CJER handbook of mandatory criminal jury instructions states, without analysis, that section 245 is a lesser included offense of section 273ab. (2000 CJER Mandatory Criminal Jury Instructions Handbook, § 2.16, p. 25.) Respondent does not argue to the contrary.

Section 273ab requires the assault on the child be "by means of force that to a reasonable person would be likely to produce great bodily injury." Section 245, subdivision (a)(1), requires the assault be "by any means of force likely to produce great

bodily injury." If the two elements are different, and we do not hold that they are, then it could only be because the force requirement in section 273ab is more restrictive than the force requirement in section 245, subdivision (a)(1). That is so since at least nominally the sections differ in that section 273ab includes a reasonable person qualification while section 245, subdivision (a)(1), does not.

Since under this reasoning the force requirement of the greater offense is the more restrictive than the force requirement of the lesser offense, it is impossible to commit the greater without necessarily committing the lesser. Thus, even if there is a difference in the force requirement of the two assault statutes, it does not affect the determination of whether one is a necessarily lesser included offense of the other.

If on retrial the court finds substantial evidence of the lesser included offense, it should instruct on that crime.

E. Accident Instruction

Appellant argues the trial court erred in refusing to instruct concerning the defense of accident and misfortune in the terms of CALJIC No. 4.45.

The defense asked the trial court to instruct: "When a person commits an act or makes an omission through misfortune or by accident under circumstances that show [no][neither][criminal intent][n]or purpose,] [nor] [criminal] negligence,] [he][she]doe not thereby commit a crime." (CALJIC No. 4.45.)

Apparently, because the charged offense and the lesser included offenses involved neither criminal negligence nor specific intent, the trial court believed an instruction on accident and misfortune was not required and refused to instruct concerning the defense.

Strictly speaking, there may have been lurking in the various versions of the incident given by Carrillo the technical possibility that Oliver was injured in an accident involving appellant. If on retrial the court finds evidence supporting a claim of accident, it should instruct concerning that defense.

F. Prosecutorial Error During Argument

Appellant argues the prosecutor misstated the law when during argument he stated that Oliver's earlier subdural hematoma was irrelevant since appellant was required to take her victim as she found him. Appellant contends to so argue was unconstitutional since it allowed the jury to convict her of a violation of section 273ab without finding the element that the assault must have been by "means of force that to a reasonable person would be likely to produce great bodily injury." Appellant argues the trial court compounded the prosecutor's error by overruling her objection to the comment.

1. Background

Section 273ab states that a person who "having the care or custody of a child who is under eight years of age, assaults the child by means of force that to a reasonable person would be likely to produce great bodily injury, resulting in the child's death" is guilty of a crime.

During opening argument the prosecutor reviewed the elements of section 273ab. As to the element requiring an assault by means of force a reasonable person would understand was likely to cause great bodily injury, the prosecutor noted testimony that reasonable persons understand that shaking a baby, with its disproportionate head weight, would likely result in great bodily injury.

In relating that element to Oliver's death, the prosecutor told the jury that the fact of Oliver's earlier subdural hematoma was irrelevant since "you take your victim as you find him." The prosecutor noted the medical examiner's conclusion that it would have required a vigorous shaking to cause a rebleed of the earlier hematoma. The prosecutor reiterated that an actor takes her victim as she finds him and gave the example of a robber who pushes a victim to the ground and the victim dies only because of a preexisting injury.

The prosecutor summed up: "The assault is grabbing and shaking. . . . [A] reasonable person would know that it would cause great bodily injury, we all know that.

And the child died as a result of the shaking."

During argument, defense counsel also discussed the elements of the crime. He stated that the prosecutor's comment that you take the victim as you find him was potentially misleading. While the court sustained objections to some of his statements, defense counsel made his point that section 273ab requires the assault be such that a reasonable person would know it was likely to produce great bodily injury. Counsel correctly told the jury there would be no violation of section 273ab if the defendant committed an assault not reasonably likely to cause great bodily injury and the victim died as the result of a vulnerability not known to the defendant. Defense counsel noted, for example, that no violation of section 273ab would occur if a caretaker, not knowing of the condition, slapped a child with hemophilia on the hand and as a result the child bleeds to death.

In closing argument, the prosecutor returned to the issue. He stated defense counsel had accused him of making a misleading statement but reminded the jury the court had sustained two or three objections to defense counsel's misstatement of the law. The prosecutor stated section 273ab required that a reasonable person know the assault was likely to cause great bodily injury. He argued a reasonable person would know that shaking a baby is likely to cause such injury. The prosecutor argued that whether Oliver died as a result of a rebleed or a new bleed was irrelevant. Appellant shook the child, an act reasonable persons understand is likely to cause great bodily injury, and as a result Oliver died.

The jury was fully instructed concerning causation and the elements of section 273ab.

2. Discussion

While we agree with appellant that the prosecutor's allusion to taking a victim as one finds him and the use of a felony murder analogy was not helpful, we conclude the jury was not misled. Viewing the arguments of counsel and the court's instructions, the jurors would understand that to be a sufficient basis for a conviction of section 273ab, the assault had to be committed by force that to a reasonable person would be likely to produce great bodily injury and set in motion a chain of events that caused death as a direct, natural and probable consequence. There was simply no possibility the jurors would conclude that a trivial, technical assault could support conviction merely because the victim died as the result of a particular vulnerability unknown to the defendant.

G. Instruction on Reasonable Doubt

The jury was instructed concerning the concept of reasonable doubt using the current version of CALJIC No. 2.90. Conceding the courts of this state have repeatedly found the instruction adequate, she nonetheless argues that it denies due process since it fails to convey the high degree of confidence required for a finding of guilt. The instruction is adequate. (See *People v. Freeman* (1994) 8 Cal.4th 450, 454, fn. 9; *People v. Hearon* (1999) 72 Cal.App.4th 1285, 1286-1287.)

H. Hardship Screening

Appellant argues the trial court erred when over objection it allowed the jury commissioner to conduct the hardship screening of prospective jurors. She contends such procedure was unconstitutional since the process was not conducted in public, defendant and counsel were not present, had no opportunity to be heard or object and because no record was kept for review. ⁷

People v. Massie, supra, 19 Cal.4th at page 580, footnote 7, defines a "venire" as "the group of prospective jurors summoned from [the jury pool] and made available, after excuses and deferrals have been granted, for assignment to a 'panel.'" (Internal quotation marks omitted.)

Section 194 of the Trial Jury Selection and Management Act (Code Civ. Proc., § 190 et seq. defines various terms:

[&]quot;(e) 'Juror Pool' means the group of prospective qualified jurors appearing for assignment to trial jury panels."

[&]quot;(g) 'Master list' means a list of names randomly selected from the source lists."

[&]quot;(h) 'Potential juror' means any person whose name appears on a source list."

[&]quot;(i) 'Prospective juror' means a juror whose name appears on the master list."

[&]quot;(k) 'Qualified juror list' means a list of qualified jurors."

[&]quot;(m) 'Source list' means a list use as a source of potential jurors."

[&]quot;(q) 'Trial jury panel' means a group of prospective jurors assigned to a courtroom for the purposes of voir dire."

1. Background

Before the start of voir dire the trial court indicated there would be 100 prospective jurors available for questioning who had been "preprocessed" by the jury commissioner, i.e., jurors who would be able to serve the three to four weeks the trial was expected to take. The defense objected to the procedure, arguing such screening was a part of the jury selection process and should be conducted by the court in the defendant's presence. The defense's concern was that given the nature of the charge, some prospective jurors would claim a hardship merely to avoid serving on the case.

The court replied that many employers would only pay the salary of jurors for five days of service. The court stated in its experience in trials lasting longer than five days many prospective jurors claimed service would be a financial hardship. The court stated it only intended the jury commissioner to address claims of economic hardship and overruled the defense objection.

The defense requested the court have the jury commissioner maintain a record of the number of jurors in the pool, the number excused and the reason a prospective juror was excused. Counsel argued such records would be helpful in determining if the process resulted in a jury panel that did not reflect a cross-section of the community. The court stated it would ask if such records, including the gender and race of the prospective jurors excused, could be kept.

After the start of voir dire, the defense moved to strike the panel based on its claim that prescreening by the jury commissioner was improper. Counsel argued it was possible the process had skewed the makeup of the panel. Prior to the jury being sworn,

the court heard the motion. The defense asked for the data concerning the prospective jurors excused. The court stated the jury commissioner told it that such information was not available.

Appellant argued she had the right to be present at all critical stages of the process.

Jury selection was such a stage. She argued that excusing a prospective juror was not a mere administrative task but required judicial discretion. Appellant also argued the process denied her a jury drawn from a fair cross-section of the community.

The prosecutor noted that from the answers of the prospective jurors during voir dire the jury commissioner merely asked if serving would cause economic hardship or if a prospective juror had a planned vacation. He argued such inquiries were race and gender neutral and granting excuses based on such considerations would not skew the makeup of the panel.

Defense counsel argued that it did not appear that the panel represented a cross-section of the community. Counsel asserted that San Diego County is 24 or 25 percent Hispanic. Based on counsel's review of the surnames on the panel, he concluded 15 percent of the panel was Hispanic. Counsel also stated his belief that the panel had a higher percentage of older persons than was true of the community as a whole. Defense counsel argued that even if the selection process was race and gender neutral, allowing economic hardship excuses would result in fewer low income or younger persons being on the panel.

The court denied the motion.

2. Relevant Statutes and Rules

Several Code of Civil Procedure sections and California Rules of Court rules apply to the excusal of jurors based on economic hardship. Code of Civil Procedure section 204, subdivision (b), states that an eligible person may be excused from jury service only for undue hardship upon themselves or upon the public as defined by the Judicial Council. Section 218 of that code requires all excuses be in writing and signed by the prospective juror. The section requires the jury commissioner to hear excuses in accordance with standards prescribed by the Judicial Council. It is within the discretion of the commissioner to accept a hardship excuse without a prospective juror appearing before him or her. Code of Civil Procedure section 194, subdivision (d), defines an "excused juror" as one "excused from service by the jury commissioner for valid reasons based on statute, state or local court rules, and polices."

California Rules of Court, rule 860 (b), defines general principles governing the granting of excuses. Subdivision (c) requires the juror seeking to be excused to state facts specifying the hardship and why the hardship cannot be avoided by a deferral of service. Subdivision (d) provides in detail the bases on which a hardship excuse may be granted. Such excuses may be granted if the prospective juror has no reasonably available means of transportation, service would require excessive travel, the prospective juror has impairments that would make service potentially harmful, the juror is immediately needed for the protection of public health and safety or must care for a person who requires the juror's personal attention. The subdivision also states an extreme

financial burden is a basis to be excused and gives four factors, including the expected length of service, for determining whether the claimed hardship is sufficient.

3. Discussion

The issue is whether the screening procedure used here, carried out over appellant's objection, prejudiced any of her rights.

We find no merit in appellant's argument that allowing the jury commissioner to conduct hardship screening of the jury pool for this case denied her the right to be present at a crucial stage of the proceeding or to counsel. First, hardship screening of the jury pool, even when conducted by the trial judge, is not a crucial stage and appellant had no absolute right to be present. (People v. Ervin (2000) 22 Cal.4th 48, 72, 74.) Neither do we think it is constitutionally significant that counsel was absent when the commissioner screened the pool to determine which prospective jurors would be financially unable to serve on this case. Appellant makes no complaint, and we find no case in which such a complaint was made, that it is constitutionally repugnant for the commissioner to conduct, in the absence of counsel or the defendant, the initial hardship screening utilized in excusing potential jurors from service. If that process is unobjectionable, then it is difficult to understand why allowing the jury commissioner to conduct, in the absence of counsel or the defendant, a financial hardship screening of the jury pool for the purposes of a particular case is improper.

We are more concerned with the failure of the trial court to require that records be kept concerning, for example, the number of jurors screened, the number excused from service and the reasons given by the excused prospective jurors in claiming financial

hardship. In *People v. Wheeler* (1978) 22 Cal.3d 258, 273, the court noted that excusing potential jurors for hardship is highly discretionary and the courts must be alert to possible abuses that would negatively affect the creating of jurys reasonably reflecting a cross-section of the community.

When prospective jurors are excused by the trial judge in open court, a record exists of the numbers excused and the reasons given. As we read Code of Civil Procedure section 218 and California Rules of Court, rule 860 (c), requests to be excused from jury service must be in writing, signed by the potential juror and placed on the court's record. The obvious purpose is to give transparency to the process and provide data potentially relevant to a review of the cross-sectional nature of the pool. No such record exists in this case.

As noted, the keeping of such a record is not for historical purposes. It is kept because it along with other evidence may be useful in demonstrating that the manner in which potential jurors are excused for hardship, either by the jury commissioner or trial court, improperly results in panels not representative of the community.

We conclude where there is a request, the trial court must require the jury commissioner to maintain a record of the hardship screening procedure.

I. Constitutionality of Section 273ab

Appellant argues section 273ab is void for vagueness as applied in this case and denies equal protection. Appellant argues the section is vague because it fails to give sufficient notice of the prohibited conduct. She argues the section denies equal protection

since it treats a child caregiver who simply assaults a child more harshly than a caregiver who murders the child.

1. Vagueness

Appellant argues that given the dispute among experts "whether shaking alone can cause, much less is 'likely to produce,' great bodily injury (GBI) in a 13-month old, 30-plus pound child, and given the lack of a requirement for subjective intent to inflict GBI, [§ 273ab] is void for vagueness." Appellant argues that given the medical debate on whether shaking can cause a subdural hematoma in a 13-month-old child, "how is it that any reasonable person would believe that it is more probable than not ('likely') that GBI will result from brief but vigorous shaking of a [young child]?"

Statutes are presumed valid and must be upheld unless their unconstitutionality is positively and unmistakably demonstrated. With regard to vagueness, the question is whether the statute provides a person of ordinary intelligence a reasonable opportunity to know what is prohibited and provides police and prosecutors with sufficiently definite guidelines to prevent arbitrary and discriminatory enforcement. (*People v. Albritton* (1998) 67 Cal.App.4th 647, 656-657.)

It is impossible, given the complexities of our language and the variability of human conduct, to achieve perfect clarity in criminal statutes. Reasonable specificity exists if the statutory language "conveys sufficiently definite warning as to the proscribed conduct when measured by common understandings and practices." (*U.S. v. Petrillo* (1947) 332 U.S. 1, 8 [67 S.Ct. 1538]; see also *People v. Deskin* (1992) 10 Cal.App.4th 1397, 1400.) Given these practical difficulties, one commentator has stated: "In practice,

unconstitutional vagueness is a concept that only works on the extreme end of the vagueness continuum. . . . Arguments that a statute appears vague in the ordinary sense will not suffice to bring relief from the courts." (Antieau, Rich, Vol. 2, Modern Constitutional Law(2ed. 1997) § 38.00, p. 429.)

There is nothing vague about section 273ab. In *Albritton* we stated "[§ 273ab] gives plain notice that the proscribed act is an assault on a child under eight years of age with force that objectively is likely to produce great bodily injury." (*People v. Albritton, supra,* 67 Cal.App.4th at pp. 657-658.) We noted that great bodily injury is clearly defined as "'a significant or substantial physical injury." (*Id.* at p. 658.) In this regard, section 273ab is analogous to the felonious assault described in section 245, subdivision (a)(1), which requires an assault "'by any means of force likely to produce great bodily injury." (*Id.* at p. 658.)

Contrary to the manner in which appellant's casts the question, section 273ab is not an SBS offense. Appellant's observations concerning scientific disagreement about the validity of SBS are irrelevant to the issue of the requisite specificity of section 273ab. Section 273ab makes clear that it is unlawful for one with custody of a child to assault that child by "means of force that to a reasonable person would be likely to produce great bodily injury." It is the jury's evaluation of the reasonable likelihood of *some* great bodily injury that is crucial, not the technical mechanism of any particular harm. While the existence or nonexistence of SBS or any other mechanism or injury might impact the issue of causation, or the sufficiency of evidence in a given case, it does not affect the basic specificity of section 273ab.

2. Denial of Equal Protection

Appellant notes she was sentenced to prison for a term of 25 years to life -- the same punishment imposed for first degree murder and longer than the sentence for second degree murder. She further notes that the intent required for a violation of section 273ab is no more than required for simple assault. She argues that to impose a term equal to that imposed for first degree murder and longer than that for second degree murder, i.e., those who intentionally kill a child, makes no sense and denies her equal protection.

a. Law

"In order to establish a meritorious claim under the equal protection provisions of our state and federal Constitutions appellant must first show that the state has adopted a classification that affects two or more similarly situated groups in an unequal manner.

[Citation.] Equal protection applies to ensure that persons similarly situated with respect to the legitimate purpose of the law receive like treatment; equal protection does not require identical treatment. [Citation.]' [Citations.]" (*People v. Gonzales* (2001) 87 Cal.App.4th 1, 12.)

""The use of the term 'similarly situated' in this context refers only to the fact that ""[t]the Constitution does not require things which are different in fact or opinion to be treated in law as though they were the same"....' [Citation.] "There is always some difference between the two groups which a law treats in an unequal manner since an equal protection claim necessarily asserts that the law in some way distinguishes between the two groups. Thus, an equal protection claim cannot be resolved by simply observing that the members of group A have distinguishing characteristic X while the members of

group B lack this characteristic. The "similarly situated" prerequisite simply means that an equal protection claim cannot succeed, and does not require further analysis, unless there is some showing that the two groups are sufficiently similar with respect to the purpose of the law in question that some level of scrutiny is required in order to determine whether the distinction is justified.' [Citation.]"... [¶] If it is determined that the law treats similarly situated groups differently, a second level of analysis is required. If the law in question impinges on the exercise of a fundamental right, it is subject to strict scrutiny and will be upheld only if it is necessary to further a compelling state interest. All other legislation satisfies the requirements of equal protection if it bears a rational relationship to a legitimate state purpose. [Citation.] [¶] In *People v. Olivas* (1976) 17 Cal.3d 236, 251, our Supreme Court declared that liberty is a fundamental interest and that classifications dealing with it must satisfy the strict scrutiny test. When exactly the strict scrutiny test must be applied to legislation defining crimes or gradations of criminal activity is a matter of dispute. [Citations.]' [Citation.]" (People v. Gonzales, *supra*, 87 Cal.App.4th at pp. 12-13.)

2. Discussion

Appellant was not denied equal protection since she is not similarly situated with those who murder children. A violation of section 273ab requires not only an assault on a child that results in death but also that the defendant have care or custody of the child. The element of care and custody in section 273ab creates a meaningful distinction between those committing that offense and murderers. Those who have the care and

custody of children not only have a particular responsibility and occupy a position of trust, they are also the persons most likely to kill children.

In any event we conclude that when legislation defines crimes or gradations of criminal activity, the distinction created need only satisfy the rational relationship test.

(*People v. Bell* (1996) 45 Cal.App.4th 1030, 1046-1049; but see *People v. Nguyen* (1997) 54 Cal.App.4th 705, 717, fn. 6.) For the reasons cited above, treating murderers and those who violate section 273ab differently bears a rational relationship to a legitimate state interest.

J. Sufficiency of Evidence

Appellant argues the evidence is insufficient to support the required finding that she applied force to Oliver that a reasonable person would believe was likely to cause great bodily injury. Appellant notes the disagreement between the prosecution and defense experts concerning whether shaking alone could cause Oliver's injuries and the absence of other injuries that would intuitively be expected to result from a violent shaking.

In determining whether the evidence is sufficient to support the verdict, we review the entire record viewing the evidence in the light most favorable to the judgment and presuming in support of the verdict the existence of every fact the jury could reasonably deduce from the evidence. The issue is whether the record so viewed discloses evidence that is reasonable, credible and of solid value such that a rational trier of fact could find the elements of the crime beyond a reasonable doubt. (*People v. Brown* (1995) 35 Cal.App.4th 1585, 1598.)

The evidence was sufficient. It is irrelevant that witnesses differed on whether shaking could cause Oliver's injuries. Trial almost by definition presents the trier of fact with conflicting evidence. The lack of additional injuries to Oliver is meaningless since prosecution experts testified such injuries do not generally result from shaking. Carrillo described and demonstrated the manner in which appellant violently shook the child. Experts testified that shaking can result in great bodily injury. Jurors could conclude a reasonable person would understand that an adult shaking a baby with the force demonstrated was likely to result in great bodily injury.

The judgment is reversed.

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	_	BENKE, J.
WE CONCUR:		
	KREMER, P. J.	
	HALLER, J.	